

CLAIMS

What is claimed is:

1. A carpet comprising:
a layer of tufting;
a backing layer; and
a breathable membrane impervious to liquid, the membrane being located between the tufting layer and the backing layer, and wherein both the tufting layer and the backing layer are permeable to water vapor.

2. A carpet according to claim 1, further comprising a stabilizing layer located alongside said breathable membrane for dimensional stability of the carpet, wherein the stabilizing layer consists essentially of interconnected yarns or fibers, plastic netting, or a grid of plastic.

3. A carpet according to claim 2, wherein the stabilizing layer comprises interconnected yarns having the form of cross-laid scrim or woven fibers.

4. A carpet according to claim 2, further comprising an adhesive disposed between the tufting layer and the membrane.

5. A carpet according to claim 4, wherein the adhesive layer is fabricated as a mixture of water based adhesive emulsion and latex emulsion.

6. A carpet according to claim 1, further comprising an adhesive disposed between the tufting layer and the membrane.

7. A carpet according to claim 6, wherein the adhesive layer is fabricated as a mixture of water based adhesive emulsion and latex emulsion.

8. A carpet according to claim 1, further comprising a stabilizing layer located between said tufting layer said breathable membrane for dimensional stability of the carpet, wherein the stabilizing layer consists essentially of interconnected yarns or fibers, plastic netting, or a grid of plastic.

9. A carpet according to claim 8, wherein the stabilizing layer comprises interconnected yarns having the form of cross-laid scrim, or interconnected fibers that are woven or nonwoven fibers.

10. A carpet according to claim 8, further comprising an adhesive disposed between the tufting layer and the stabilizing layer.

11. A carpet according to claim 10, wherein the adhesive layer is fabricated as a mixture of water based adhesive emulsion and latex emulsion.

12. A carpet according to claim 10, wherein the backing layer comprises an apertured film laminated to the membrane on a side thereof opposite the tufting layer.

13. A carpet according to claim 8, wherein the backing layer comprises an apertured film laminated to the membrane on a side thereof opposite the tufting layer.

14. A carpet according to claim 1, wherein said backing layer is a secondary backing layer disposed on a surface of the carpet opposite said tufting layer, the carpet further comprises a primary backing layer for receiving threads of the tufting layer, and said breathable membrane is located between said primary and said secondary backing layers.

15. A carpet according to claim 14 wherein said secondary backing is a synthetic material, a polymeric material, or a natural material.

16. A carpet according to claim 14 wherein said secondary backing is a foam or a padding.

17. A carpet according to claim 1 wherein the breathable membrane has a moisture vapor transmission rate of water through the membrane in a range of 50 - 2000 grams / square meter / 24 hours by Test Method ASTM E96 , Up-Cup Method with ambient conditions of 23 degrees C and a Relative Humidity of 50%.

18. A carpet comprising:
a layer of tufting;
a primary backing layer receiving tufting of the tufting layer; and
a breathable membrane impervious to liquid, the membrane being located on a side of the primary backing layer opposite the tufting layer, and wherein both the tufting layer and the primary backing layer are permeable to water vapor.

19. A carpet according to claim 18 wherein the breathable membrane is laminated to the primary backing layer.

20. A carpet according to claim 18 further comprising an adhesive disposed between the primary backing layer and the breathable membrane for securing the breathable membrane to the primary backing layer.

21. A carpet according to claim 18 further comprising a stabilizing layer located between said primary backing layer and said breathable membrane for dimensional stability of the carpet, wherein the stabilizing layer consists essentially of interconnected yarns or fibers, plastic netting, or a grid of plastic.

22. A carpet according to claim 21 wherein the stabilizing layer comprises interconnected yarns having the form of cross-laid scrim, or interconnected fibers that are woven or nonwoven fibers.

23. A carpet according to claim 22, further comprising a secondary backing layer secured to a side of said breathable membrane opposite said tufting layer, wherein said secondary backing layer comprises an apertured film.